



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,620	12/28/2001	Durga P. Satapathy	1474	3860

21396 7590 02/26/2007
Sprint
6391 SPRINT PARKWAY
KSOPHT0101-Z2100
OVERLAND PARK, KS 66251-2100

EXAMINER

BEAMER, TEMICA M

ART UNIT	PAPER NUMBER
----------	--------------

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/035,620

Applicant(s)

SATAPATHY ET AL.

Examiner

Temica M. Beamer

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-69 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 13-21, 23, 24, 26-37, 39, 41-50, 56-61, 63, 64 and 66-69 are rejected under 35 U.S.C. 102(b) as being anticipated by McConnell et al (McConnell), U.S.

Patent No. 6,944,150.

Regarding claims 1 and 48, McConnell discloses a system/method for multiple access comprising a wireline switch (22) configured to communicate using a wireline communication (figures 1-3); a wireless switch (20 or 24) configured to communicate using a wireless communication (figures 1-3); and an access device (12) configured to engage in the wireline communication to communicate with the wireline switch and to engage in the wireless communication to communicate with the wireless switch (col. 6, lines 31-43).

Regarding claims 2 and 49, McConnell discloses the system/method of claims 1 and 48 wherein the access device is configured to receive the wireless communication from the wireless switch and to receive the wireline communication from the wireline switch (col. 6, lines 31-43; figures 1-3).

Regarding claims 3 and 50, McConnell discloses the system/method of claims 1 and 48 wherein the access device is configured to transmit the wireless communication to the wireless switch and to transmit the wireline communication to the wireline switch (col. 6, lines 31-43; figures 1-3).

Regarding claim 4, McConnell discloses the system of claim 1 wherein the wireless communication comprises at least one member of a group comprising a multipoint multichannel distribution service spectrum communication, a code division multiplex access communication, a personal communication service communication, an unlicensed personal communications services spectrum communication, an industrial scientific medical spectrum communication, an unlicensed national information infrastructure spectrum communication, and a satellite service communication (col. 1, lines 38-52).

Regarding claim 5, McConnell discloses the system of claim 1 wherein the wireline communication comprises at least one member of a group comprising a digital subscriber line based communication and a hybrid fiber coaxial based communication (col. 2, lines 51-59).

Regarding claim 6, McConnell discloses the system of claim 1 wherein the access device and the wireless switch are not within line of sight (figures 1- 3).

Regarding claim 13, McConnell discloses the system of claim 1 wherein the access device comprises a digital subscriber line modem (col. 2, lines 50-59).

Regarding claim 14, McConnell discloses the system of claim 1 wherein the wireline switch comprises a digital subscriber line access multiplexer (col. 2, lines 50-59).

Regarding claim 15, McConnell discloses the system of claim 1 wherein the wireline switch comprises at least one member of a group comprising a local exchange carrier switch and an interexchange carrier switch (figures 1-3).

Regarding claims 16-19, and 56-59, McConnell discloses the system/method of claims 1 and 48 wherein the access device is configured to process the wireless communication with at least one member of a group comprising encryption, de-encryption, encoding, decoding, multiplexing, de-multiplexing, modulation, and demodulation (inherent to wireless and wireline communications (col. 6, lines 31-43; figures 1-3).

Regarding claims 20 and 60, McConnell discloses the system/method of claims 1 and 48 further comprising a service node configured to communicate with the wireless switch (figures 1-3).

Regarding claims 21 and 61, McConnell discloses the system/method of claims 20 and 60 wherein the service node is configured to communicate with the wireless switch using at least one member of a group comprising a wireless communication and a wireline communication (figures 1-3).

Regarding claims 23 and 63, McConnell discloses the system/method of claims 1 and 48 further comprising a service node configured to communicate with the wireline switch (figures 1-3).

Regarding claims 24 and 64, McConnell discloses the system/method of claims 23 and 63 wherein the service node is configured to communicate with the wireline switch using at least one member of a group comprising a wireless communication and a wireline communication (figures 1-3).

Regarding claims 26 and 66, McConnell discloses the system/method of claims 1 and 48 wherein the wireless communication comprises a first service type communication and the wireline communication comprises a second service type communication (col. 6, lines 31-43).

Regarding claim 27, McConnell discloses a system for multiple access comprising: a wireline switch configured to receive a first set of communications, to format the first set of communications as at least one wireline communication, and to transmit the at least one wireline communication a wireless switch configured to receive a second set of communications, to format the second set of communications as at least one wireless communication, and to transmit the at least one wireless communication; and an access device configured to receive the at least one wireline communication and the at least one wireless communication (col. 6, lines 31-43).

Regarding claim 28, McConnell discloses the system of claim 27 wherein the first set of communications are formatted as a plurality of wireline communications, and the wireline switch is configured to transmit the plurality of wireline communications to the access device (col. 6, lines 31-43; figures 1-3).

Regarding claim 29, McConnell discloses the system of claim 27 wherein the wireline switch comprises a digital subscriber line access multiplexer, and the digital

Art Unit: 2617

subscriber line access multiplexer is configured to multiplex the first set of communications as at least one digital subscriber line wireline communication (col. 2, lines 51-59).

Regarding claim 30, McConnell discloses the system of claim 27 wherein the second set of communications are formatted as a plurality of wireless communications, and the wireless switch is configured to transmit the plurality of wireless communications to the access device (figures 1-3).

Regarding claim 31, McConnell discloses the system of claim 27 further comprising a premises equipment wherein the access device is configured to format the wireless communication to a digital communication and to transmit the digital communication to the premises equipment (col. 6, lines 44-55).

Regarding claim 32, McConnell discloses the system of claim 31 wherein the digital communication comprises voice based data, and the premises equipment is configured to format the digital communication as an analog communication for voice access (col. 6, lines 44-55).

Regarding claim 33, McConnell discloses the system of claim 27 further comprising a premises equipment wherein the wireless communication comprises voice-based data, and the access device is configured to format the wireless communication to an analog communication for voice access and to transmit the analog communication to the premises equipment (col. 6, lines 44-55).

Regarding claim 34, McConnell discloses the system of claim 27 wherein the first set of communications comprises data representative of at least one member of a group

Art Unit: 2617

comprising voice-based data, internet protocol data, digital data, video data, and media data (col. 6, lines 31-55).

Regarding claim 35, McConnell discloses the system of claim 27 wherein the second set of communications comprises data representative of at least one member of a group comprising voice-based data, internet protocol data, digital data, video data, and media data (col. 6, lines 31-55).

Regarding claim 36, McConnell discloses a system for multiple access comprising: an access transceiver configured to communicate using a wireline communication and a wireless communication; a medium access control layer configured to control access to the access transceiver for communicating the wireline communication and the wireless communication (figures 1- 3); and a service hub configured to communicate first data for the wireline communication and second data for the wireless communication for at least one premises communication (col. 6, lines 31-67; figures 1-3).

Regarding claim 37, McConnell discloses the system of claim 36 further comprising a multiplexer configured to demultiplex the wireline communication and the wireless communication (col. 6, lines 44-55).

Regarding claim 39, McConnell discloses the system of claim 36 further comprising a multiplexer configured to multiplex at least one member of a group comprising the first data and the second data (col. 6, lines 44-55).

Regarding claim 41, McConnell discloses the system of claim 36 further comprising a modulator configured to modulate data from the premises communication

Art Unit: 2617

for generation of at least one member of a group comprising the wireline communication and the wireless communication (col. 6, lines 44-55).

Regarding claim 42, McConnell discloses the system of claim 36 further comprising a modulator configured to demodulate data from at least one member of a group comprising the wireline communication and the wireless communication for generation of the premises communication (col. 6, lines 44-55).

Regarding claim 43, McConnell discloses the system of claim 36 wherein the access transceiver comprises at least one member of a group comprising a plain old telephone service port, a digital subscriber line port, a hybrid fiber coaxial port, and an antenna (col. 2, lines 39-50).

Regarding claim 44, McConnell discloses the system of claim 36 further comprising a premises equipment comprising at least one member of a group comprising a computer, a telephone, a set top box, and a narrowband device (figures 1-3).

Regarding claim 45, McConnell discloses the system of claim 36 wherein the access transceiver is configured to transmit or receive the wireline communication and the wireless communication (col. 6, lines 31-55).

Regarding claim 46, McConnell discloses the system of claim 36 wherein the medium access control layer further is configured to control a resource for combining first data from the wireline communication and second data from the wireless communication to another communication (col. 6, lines 44-55).

Regarding claim 47, McConnell discloses the system of claim 36 wherein the service hub is configured to transmit or receive the premises communication (figures 1-3).

Regarding claim 67, McConnell discloses a method for multiple access comprising: receiving a first set of communications at a wireline switch, formatting the first set of communications as at least one wireline communication, and transmitting the at least one wireline communication; receiving a second set of communications at a wireless switch, formatting the second set of communications as at least one wireless communication, and transmitting the at least one wireless communication; and receiving the at least one wireline communication and the at least one wireless communication at an access device (col. 6, lines 31-55; figures 1-3).

Regarding claim 68, McConnell discloses the method of claim 67 further comprising formatting the first set of communications as a plurality of wireline communications, and transmitting the plurality of wireline communications to the access device (col. 6, lines 31-55; figures 1-3).

Regarding claim 69, McConnell discloses the method of claim 67 further comprising formatting the second set of communications as a plurality of wireless communications, and transmitting the plurality of wireless communications to the access device (col. 6, lines 31-55; figures 1-3).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7-12, 22, 25, 38, 40, 51-55, 62 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over McConnell in view of well known prior art.

Regarding claim 7, McConnell discloses the system of claim 1 wherein the access device is configured to process at least one member of a group comprising the wireless communication and the wireline communication using a multiplex asynchronous transfer mode protocol (col. 6, lines 44-55).

McConnell, however, fails to specifically disclose using inverse multiplex ATM. The examiner contends, however, that such a protocol is well known and widely used in the industry, and the examiner takes official notice as such.

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify McConnell with the teachings of well known prior art since such a protocol is used for processing signals. Further, the examiner believes that such a limitation would not render the claims patentable over the applied reference because such a limitation depends merely on how one would like to process the signals.

Regarding claims 8 and 51, McConnell, as modified, discloses the system/method of claims 7 and 48 wherein the processing using inverse multiplex

Art Unit: 2617

asynchronous transfer mode protocol comprises at least one member of a group comprising multiplexing and de-multiplexing (col. 6, lines 44-55).

Regarding claims 9 and 52, McConnell, as modified, discloses the system of claims 1 and 48 wherein the access device further is configured to receive the wireless communication, to receive the wireline communication, and to use a multiplex asynchronous transfer mode protocol to combine data from the wireless communication and other data from the wireline communication to form a premises communication (col. 6, lines 31-55; figures 1-3).

McConnell, however, fails to specifically disclose using inverse multiplex ATM. The examiner contends, however, that such a protocol is well known and widely used in the industry, and the examiner takes official notice as such.

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify McConnell with the teachings of well known prior art since such a protocol is used for processing signals. Further, the examiner believes that such a limitation would not render the claims patentable over the applied reference because such a limitation depends merely on how one would like to process the signals.

Regarding claims 10 and 53, McConnell, as modified discloses the system/method of claims 9 and 52 further comprising a premises equipment configured to receive the premises communication from the access device (figures 1- 3).

Regarding claims 11 and 54, McConnell discloses the system/method of claims 1 and 48 wherein the access device is configured to use a multiplex asynchronous transfer mode protocol to process a first portion of data for transmission in the wireless

Art Unit: 2617

communication and to process a second portion of data for transmission in the wireline communication (col. 6, lines 31-55; figures 1-3).

McConnell, however, fails to specifically disclose using inverse multiplex ATM. The examiner contends, however, that such a protocol is well known and widely used in the industry, and the examiner takes official notice as such.

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify McConnell with the teachings of well known prior art since such a protocol is used for processing signals. Further, the examiner believes that such a limitation would not render the claims patentable over the applied reference because such a limitation depends merely on how one would like to process the signals.

Regarding claims 12 and 55, McConnell discloses the system/method of claims 11 and 54 further comprising a premises equipment configured to transmit a premises communication to the access device, the premises communication comprising the first portion of data and the second portion of data (figures 1- 3).

Regarding claims 22, 25, 62 and 65 McConnell discloses the system/method of claims 20, 23, 61 and 63 as described above wherein the service node is configured to use multiplex asynchronous transfer mode protocol to process a portion of data for transmission to the wireless/wireline switch (col. 6, lines 44-55).

McConnell, however, fails to specifically disclose using inverse multiplex ATM. The examiner contends, however, that such a protocol is well known and widely used in the industry, and the examiner takes official notice as such.

Art Unit: 2617

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify McConnell with the teachings of well known prior art since such a protocol is used for processing signals. Further, the examiner believes that such a limitation would not render the claims patentable over the applied reference because such a limitation depends merely on how one would like to process the signals.

Regarding claims 38 and 40, McConnell discloses the system of claims 37 and 39 wherein the multiplexer is configured to process the wireline communication/first data and the wireless communication/second data with a multiplex asynchronous transfer mode protocol to generate another communication (col. 6, lines 44-55).

McConnell, however, fails to specifically disclose using inverse multiplex ATM. The examiner contends, however, that such a protocol is well known and widely used in the industry, and the examiner takes official notice as such.

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify McConnell with the teachings of well known prior art since such a protocol is used for processing signals. Further, the examiner believes that such a limitation would not render the claims patentable over the applied reference because such a limitation depends merely on how one would like to process the signals.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2617

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temica M. Beamer whose telephone number is (571) 272-7797. The examiner can normally be reached on Monday-Thursday (alternate Fridays) 7:30am-4:00pm.

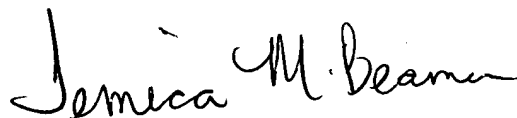
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Temica M. Beamer
Primary Examiner
Art Unit 2617

tmb

A handwritten signature in black ink that reads "Temica M. Beamer". The signature is written in a cursive style with a large, stylized 'T' and 'M'.

TEMICA BEAMER
PRIMARY EXAMINER